

## WHAT IS CLAIMED IS:

1. A brake device for a motor vehicle, the brake device including a friction first element suitable for having a first face pressed against a first face of a second  
5 element which is secured to a wheel of the motor vehicle in order to slow said vehicle down, and an application third element for applying a braking force bearing via a first end against a second face of the friction first element that is opposite from the first face of the  
10 friction first element and suitable for pressing the friction first element against the second element, said brake device also including amplifier means for modifying the inclination of a tiltable plane containing the bearing surface between the friction first element and  
15 the application third element relative to a plane containing the first face of the second element.
2. A brake device according to claim 1, wherein the means make it possible for the inclination of the plane  
20 containing the bearing surface between the friction first element and the application third element to be modified continuously relative to the plane containing the first face of the second element.
- 25 3. A brake device according to claim 1, wherein the first means are constituted by a brake pad having a rigid support carrying the second face and a lining provided with the first face suitable for coming into contact with a first face of the brake disk, and wherein the third  
30 element includes a piston provided with the first face in contact with the second face of the rigid support via the amplifier means and a braking force generator suitable for applying a braking force to the piston.
- 35 4. A device according to claim 3, wherein the braking force generator is a master cylinder.

5. A device according to claim 3, wherein the braking force generator is an electric motor.

6. A device according to claim 3, wherein the braking  
5 force generator is a hydraulic pump.

7. A device according to claim 1, wherein the means  
comprise a first part that is mounted to pivot in the  
piston, in the first end of said piston, and a second  
10 part mounted to pivot in the friction first element, in  
the second face of the friction first element, and  
wherein the first and second parts are in mutual abutment  
respectively via first and second plane faces, said faces  
being parallel to the tiltable plane.

15 8. A device according to claim 7, wherein the first part  
is substantially in the shape of a half-cylinder disposed  
in a semi-cylindrical cavity integral with the piston and  
wherein the second part has substantially the shape of a  
20 half-cylinder disposed in a semi-cylindrical cavity in  
the friction first element.

9. A device according to claim 7, wherein the first part  
is substantially in the shape of a half-sphere disposed  
25 in a hemispherical cavity integral with the piston, and  
wherein the second part is substantially in the shape of  
a half-sphere disposed in a hemispherical cavity integral  
with the friction first element.

30 10. A device according to claim 7, wherein the means  
further comprise friction-reducing means for reducing the  
friction between respective ones of the first and second  
parts and respective ones of the first and second  
cavities, and also between the first and second faces of  
35 the first and second parts.

11. A device according to claim 10, wherein the friction-reducing means are ball bearings.

12. A device according to claim 1, wherein the amplifier  
5 means are activated by an electric motor.

13. A device according to claim 1, also including a parking brake mechanism co-operating with the braking force amplifier means so that the tiltable plane is  
10 tilted in the same direction as the gradient on which the motor vehicle is parked.

14. A device according to claim 1, including additional means for applying a braking force against the friction  
15 first element.

15. A device according to claim 3, including additional means for applying a braking force against the friction first element, and wherein the additional means are  
20 resilient means exerting a force on the piston so as to press the friction first element against the second element in the event that the generator fails.

16. A device according to claim 1, wherein the means also  
25 make it possible to press the friction first element against the second element.

17. A device according to claim 7, wherein the means also make it possible to press the friction first element  
30 against the second element, and wherein the assembly formed by the first and second portions form a cam having a pivot axis.

18. A device according to claim 17, wherein the assembly  
35 formed by the first and second portions has a cross-section that is substantially ellipsoidal.

19. A brake system including an electronic computer, a brake control suitable for being actuated by a driver, detection means for detecting when said brake control is actuated, and detection means for detecting the speed of at least one wheel, said brake system also including at least one brake device according to claim 1, applied to said wheel, the amplifier means being controlled by the electronic computer.

20. A brake system according to claim 19, wherein the amplifier means of the device are activated when actuation of the brake control is detected that corresponds to a level of deceleration greater than a predetermined value.

21. A system according to claim 19, wherein the amplifier means are actuated for a deceleration value to be reached that is greater than a predetermined value.

22. A system according to claim 19, wherein the amplifier means are activated in the event that a necessity to decelerate said wheel is detected.